U. S. Military Mortality 1980-1998

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Why Comprehensive Medical Study of Military Deaths?

- Death is a well-defined end point
- Death represents serious illness/injury
- Deaths are high visibility to society
- Deaths often result in litigation
- Deaths create policy implications
- Deaths represent the tip of the iceberg of medical events

Medical Mortality Surveillance

- **First Level**
  - Population-based counts of deaths
  - compare rates over time, by unit, etc.
- **Second Level**
  - Superficial determination of cause/manner
  - this makes comparisons more meaningful
- **Third Level**
  - Validation and review of records/investigations
  - get detailed medical/circumstantial causes

Third Level Medical Surveillance

- **Third level surveillance is necessary to determine:**
  - whether the data being collected are accurate
  - specific characteristics of the diseases/injuries
  - what preventive measures may be applicable
  - whether prevention programs are working
  - evaluation of cost-effectiveness

DoD Medical Mortality Registry

- Collect, in real time, all active duty deaths
- Collect all critical medical information:
  - Death Certificate
  - Autopsy Report
  - AFIP Consult & Toxicology
  - Eyewitness Accounts/Investigative Reports
  - Medical and Personnel Records
- Perform medical and circumstantial review
- Maintain medical computer data base

DoD Casualty System

- The current DoD casualty system:
  - identifies each military death
  - provides notification and support for the family
  - provides management of the remains
  - provides military burial honors
  - arranges for payment of benefits
- The service casualty offices collect some medical information and provide computerized reports to DIOR

Registry Data Collection

- The service casualty offices & DIOR provide real-time notification of deaths
- The Registry collects copies of the DoD Casualty Report Forms (DD Form 1300)
- The Registry requests additional data:
  - autopsy report & death certificate
  - AFIP consultation and toxicology report
  - legal, safety center, and other investigative reports
  - medical records (psychological autopsy report)
  - personnel records

Registry Review and Analysis

- Electronic information is transferred and initial information is immediately entered into the DoD-MMR database
- Paper records are reviewed to abstract the medical diagnostic information and itemize risk factors and environmental and operational circumstances

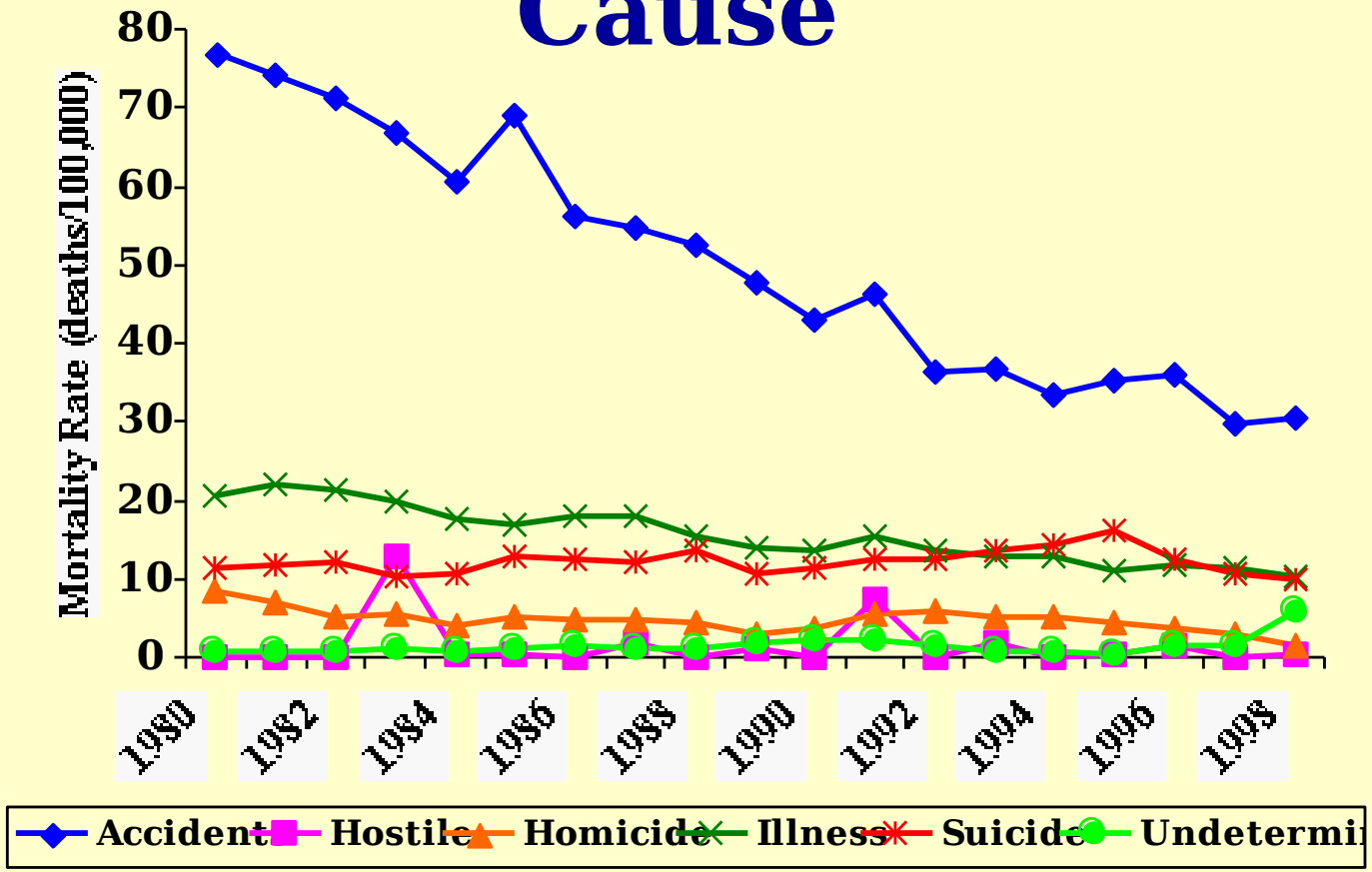
Registry Review and Analysis

- Registry analyses are conducted to establish time trends, risk factor analyses, etc.
  - public reports provide only anonymous information
- The Registry obtains military personnel information from DMDC
  - this allows calculation of death rates by subgroup
- The Registry provides an accurate, complete, systematic data source for research on specific mortality-related issues

Preliminary Results

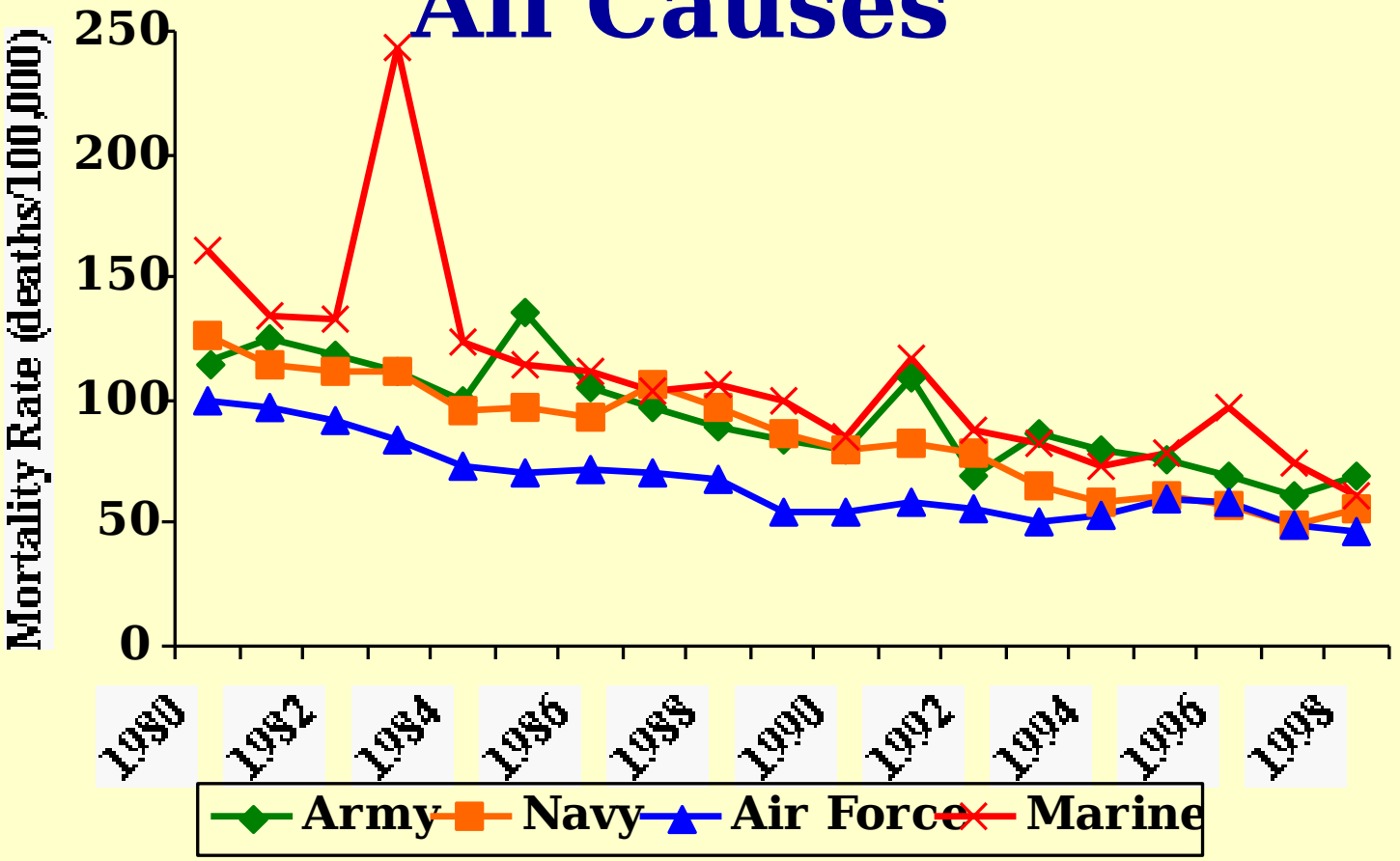
- All military active duty deaths since 1980
  - complete information by manner of death
- Military population data for 1980 - 1998
- Mortality Rates for Manner of Death by:
  - Branch of service
  - Gender
  - Grade/Rank groupings
  - Age groupings

Military Mortality Rates by Cause



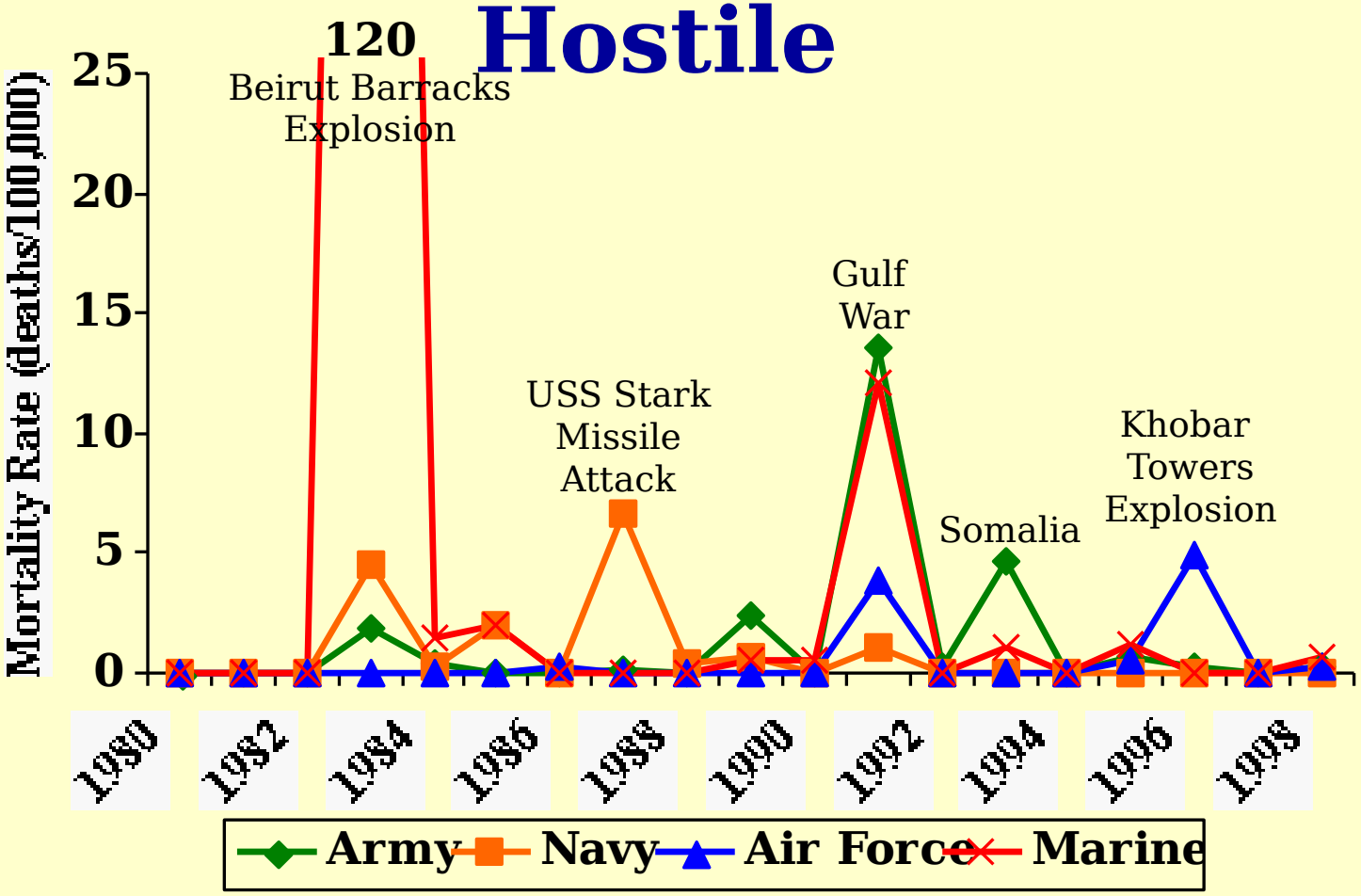
DoD Medical Mortality Registry

Mortality Rates by Service, All Causes



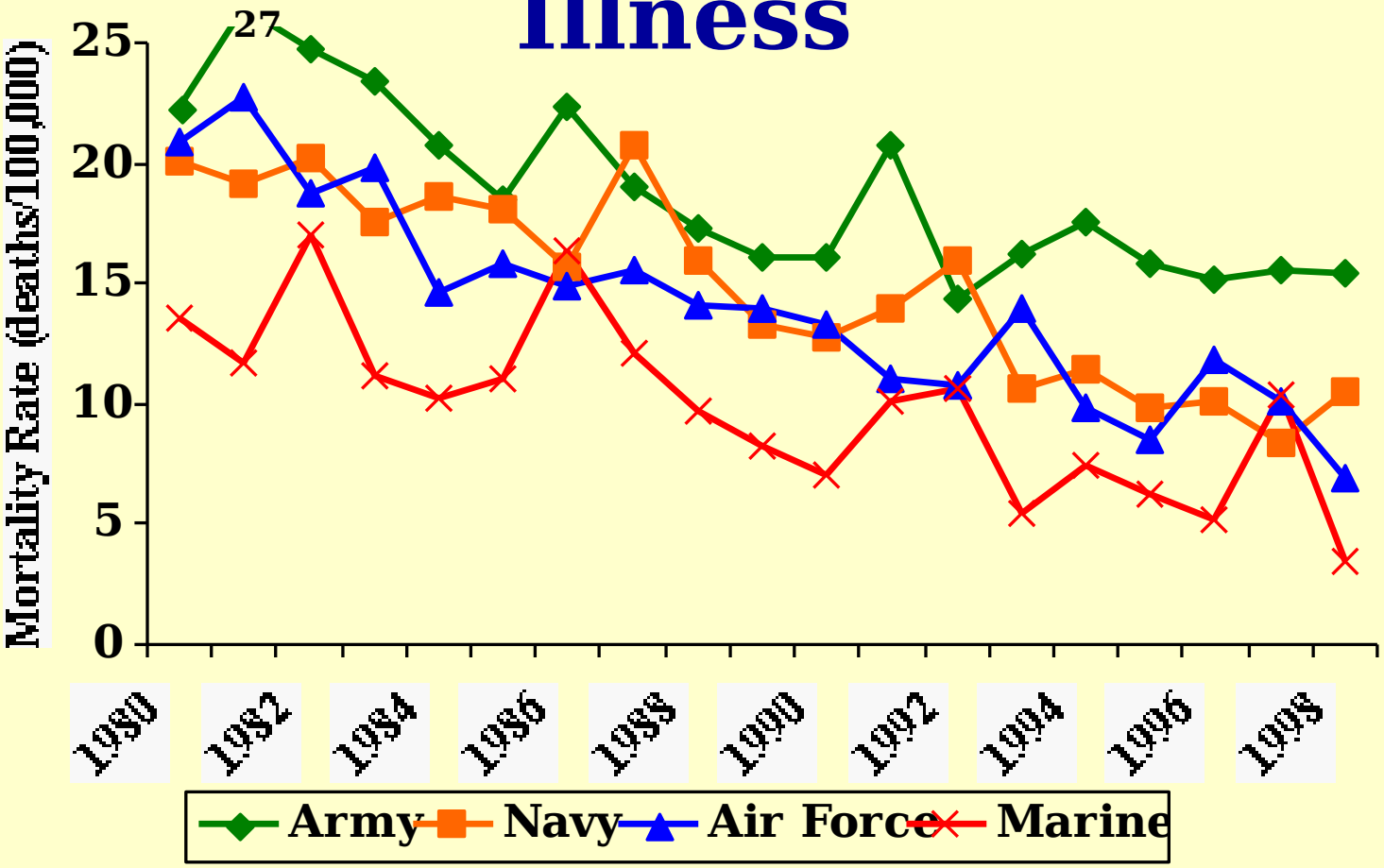
DoD Medical Mortality Registry

Mortality Rates by Service, Hostile



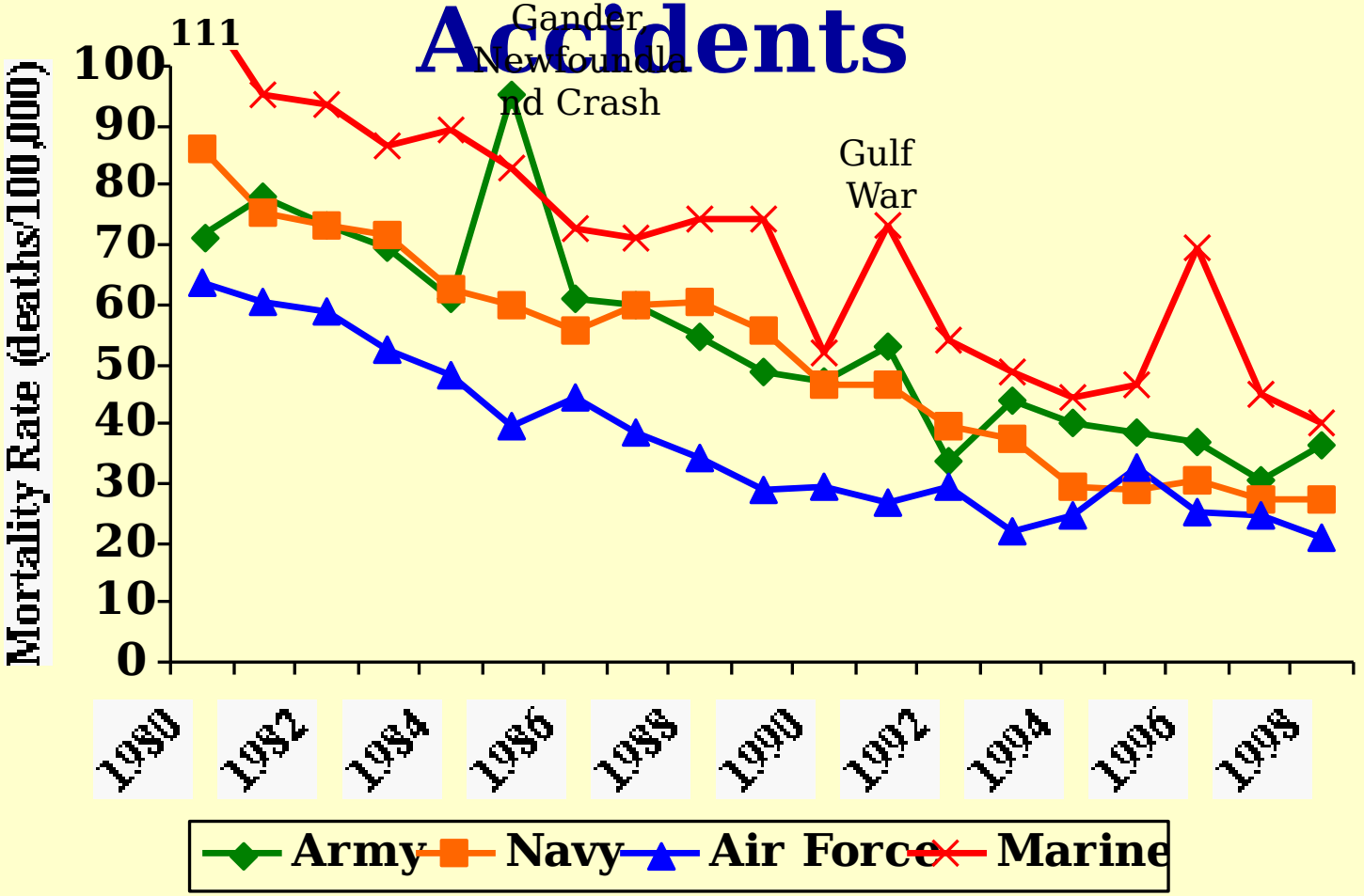
DoD Medical Mortality Registry

Mortality Rates by Service, Illness



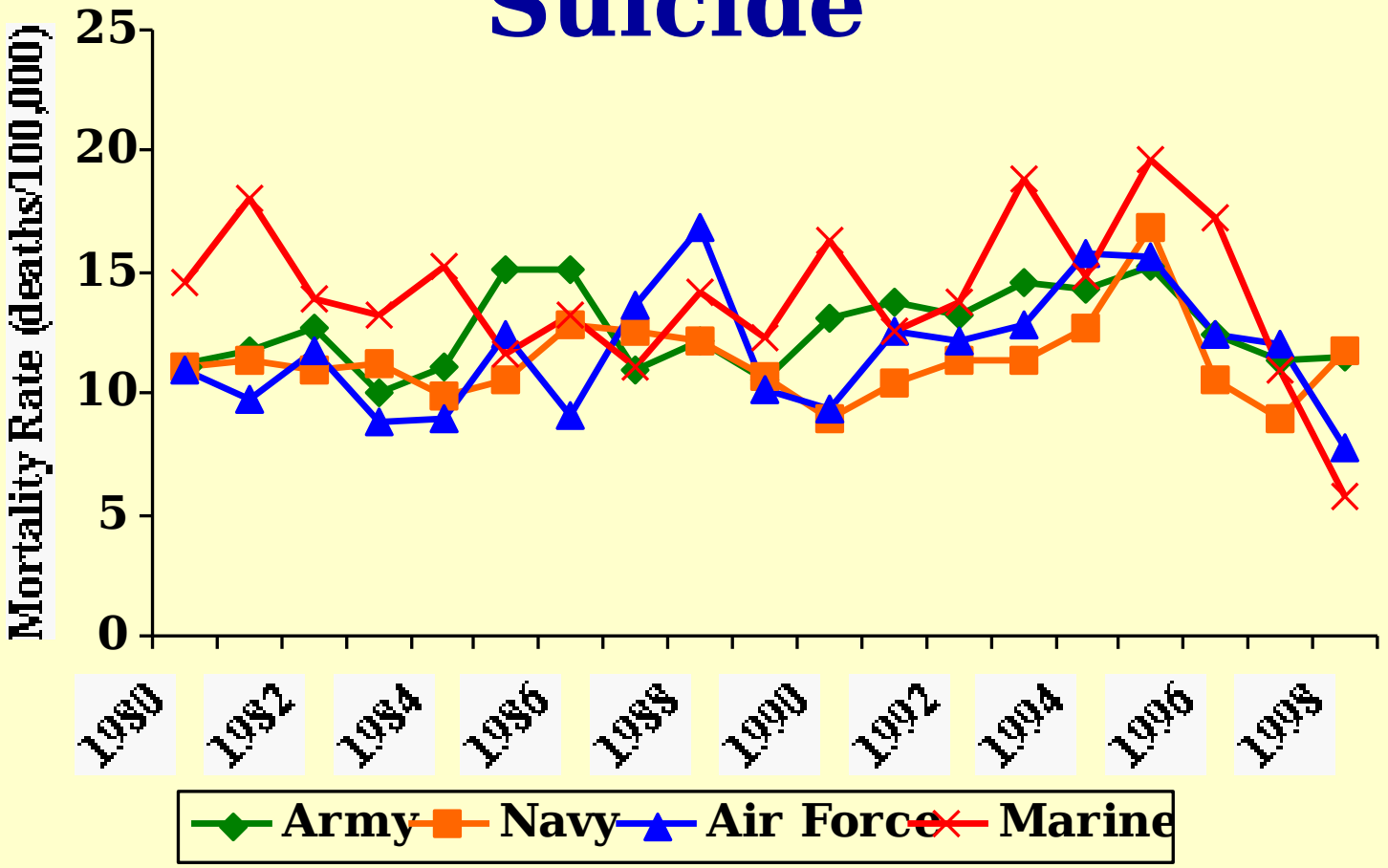
DoD Medical Mortality Registry

Mortality Rates by Service, Accidents



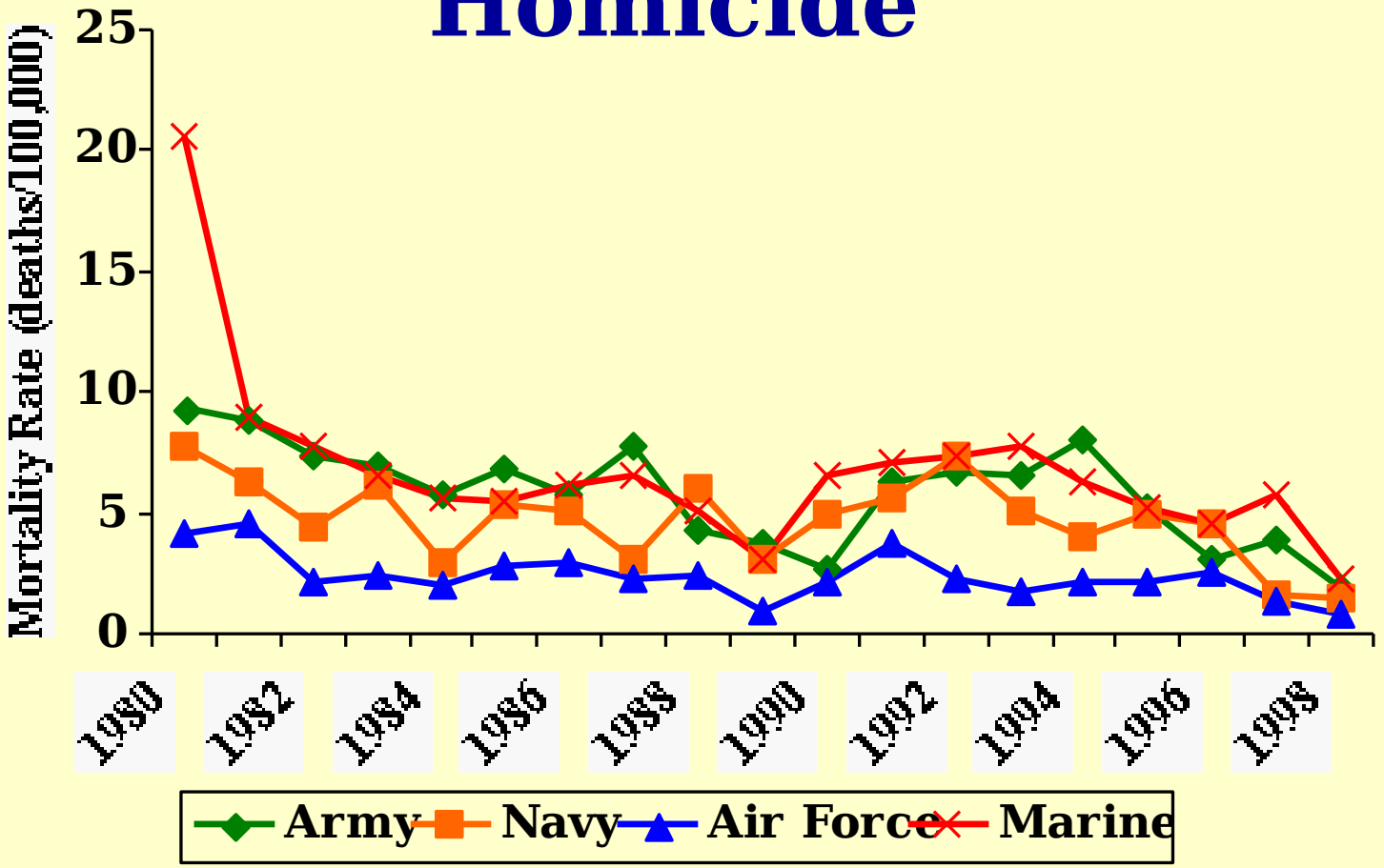
DoD Medical Mortality Registry

Mortality Rates by Service, Suicide



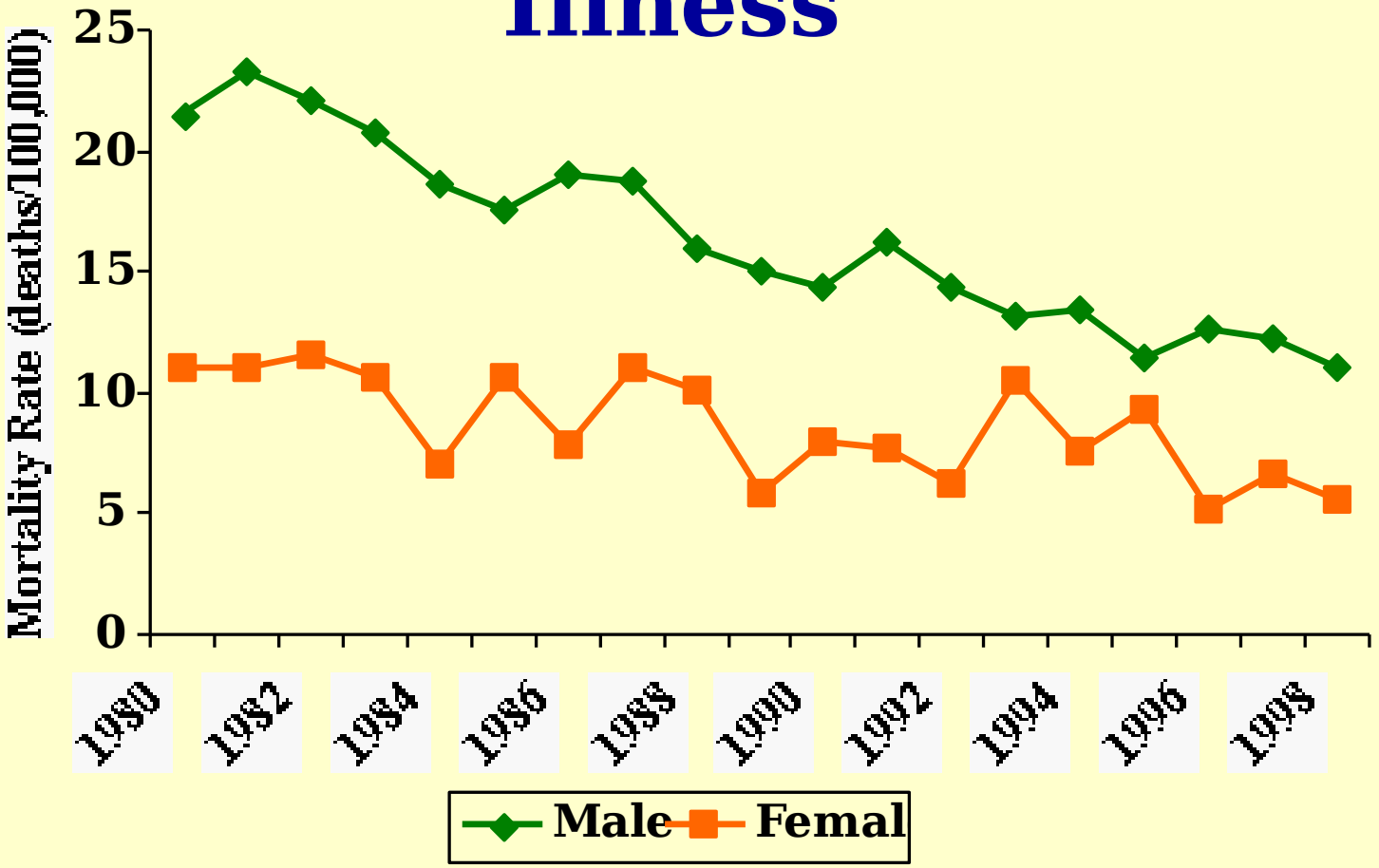
DoD Medical Mortality Registry

Mortality Rates by Service, Homicide



DoD Medical Mortality Registry

Mortality Rates by Gender, Illness



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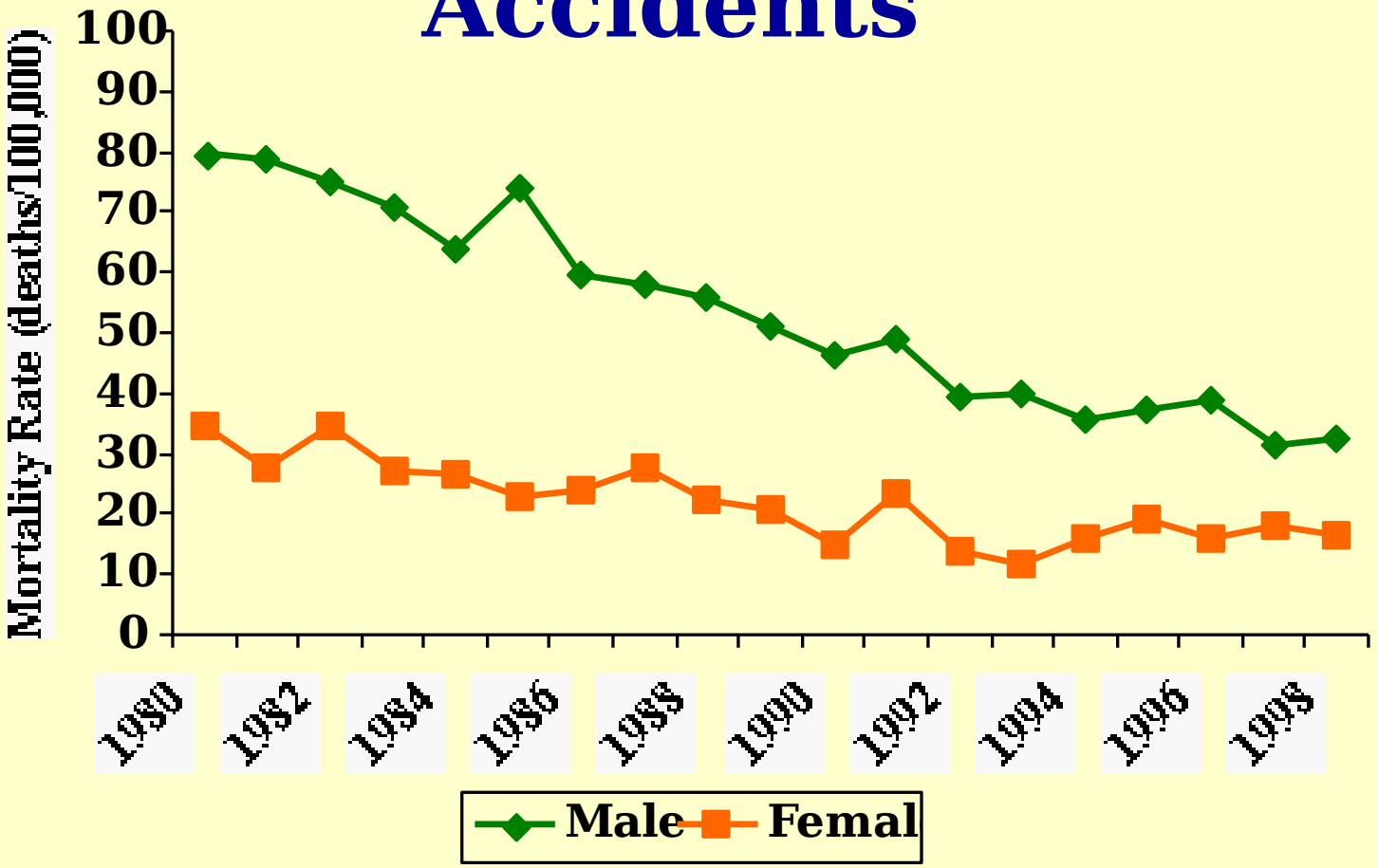
Mortality Rates by Gender, Accidents



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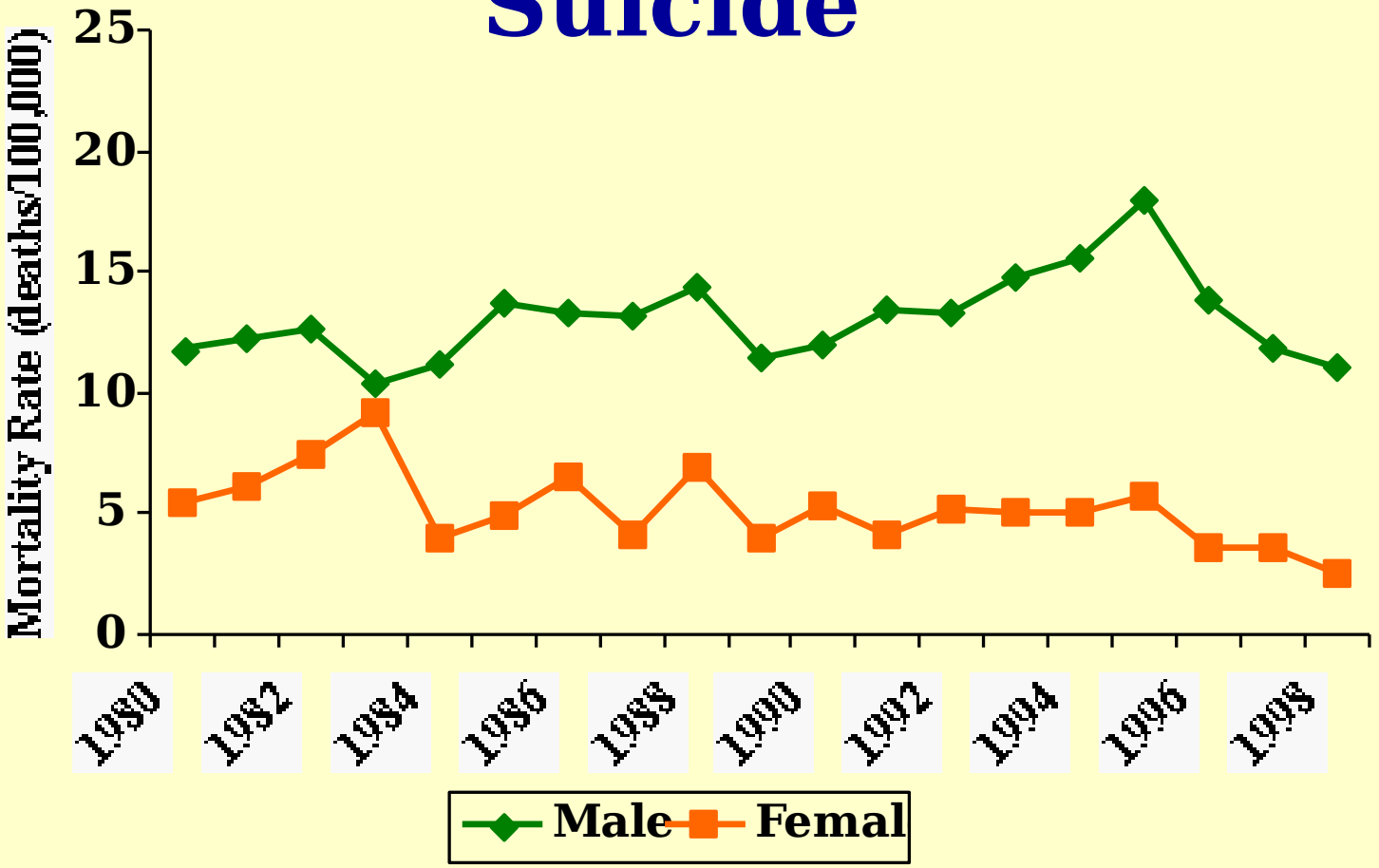
Mortality Rates by Gender, Suicide



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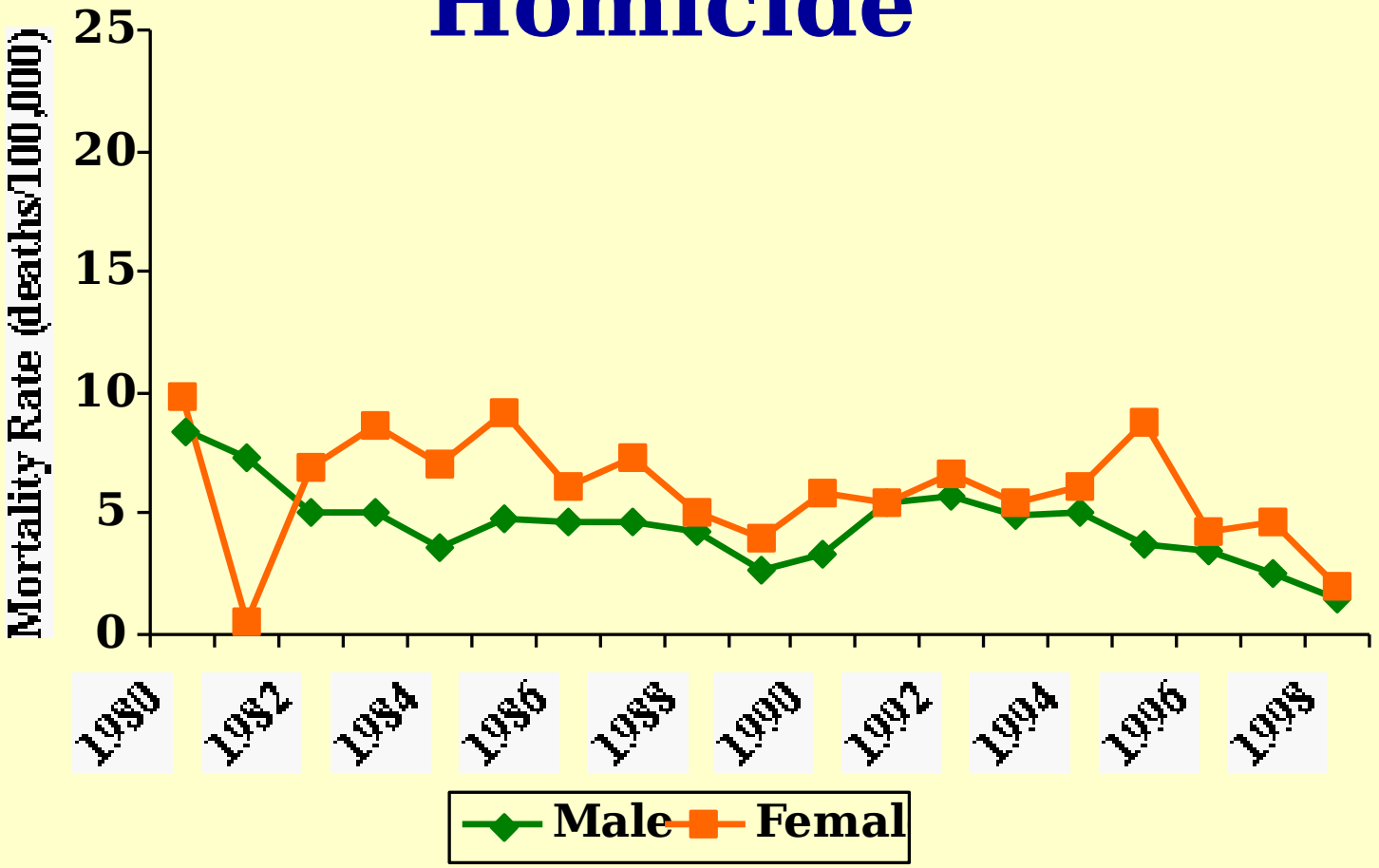
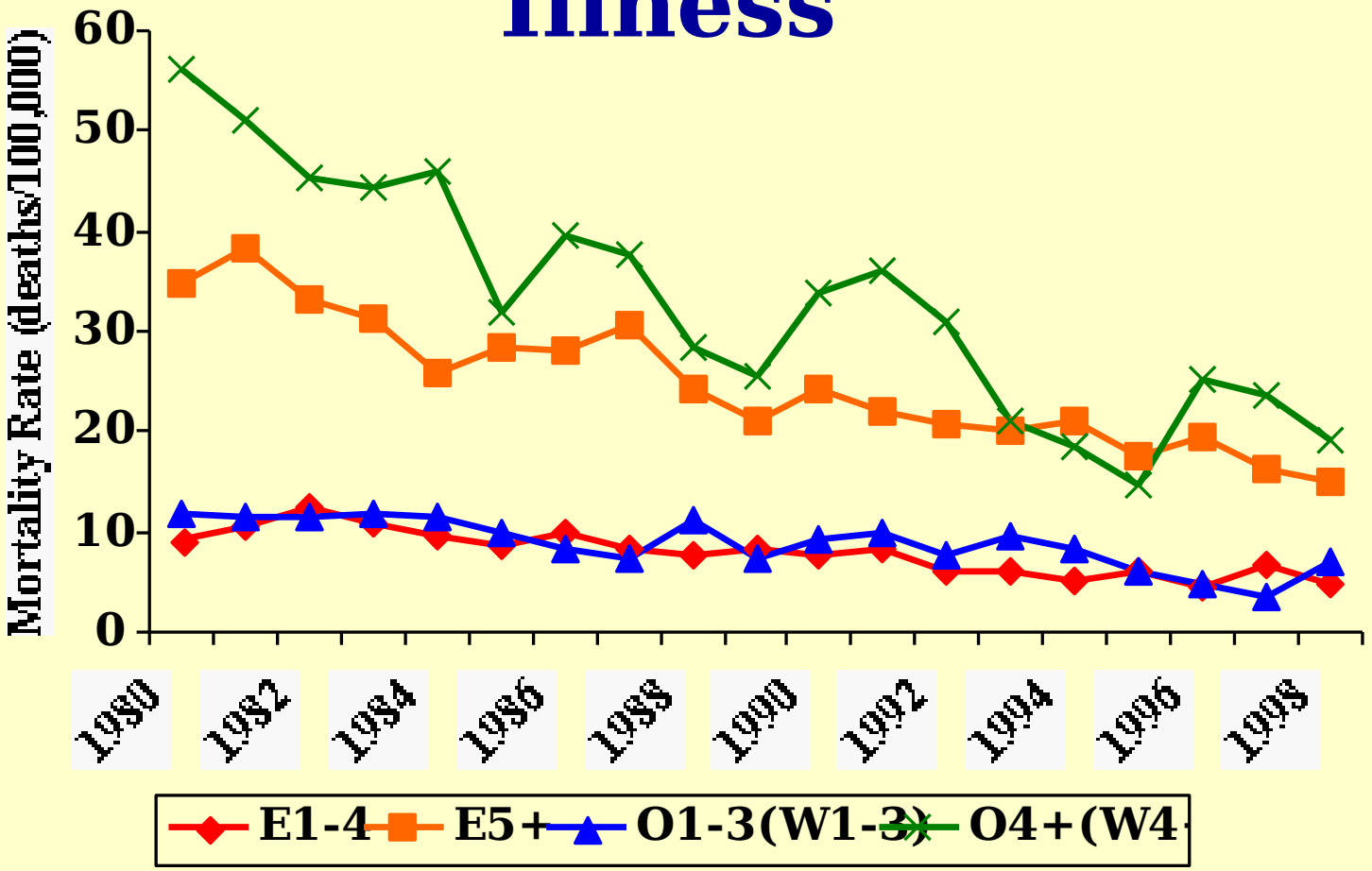
Mortality Rates by Gender, Homicide



DoD Medical Mortality Registry

Mortality Rates by Grade, Illness



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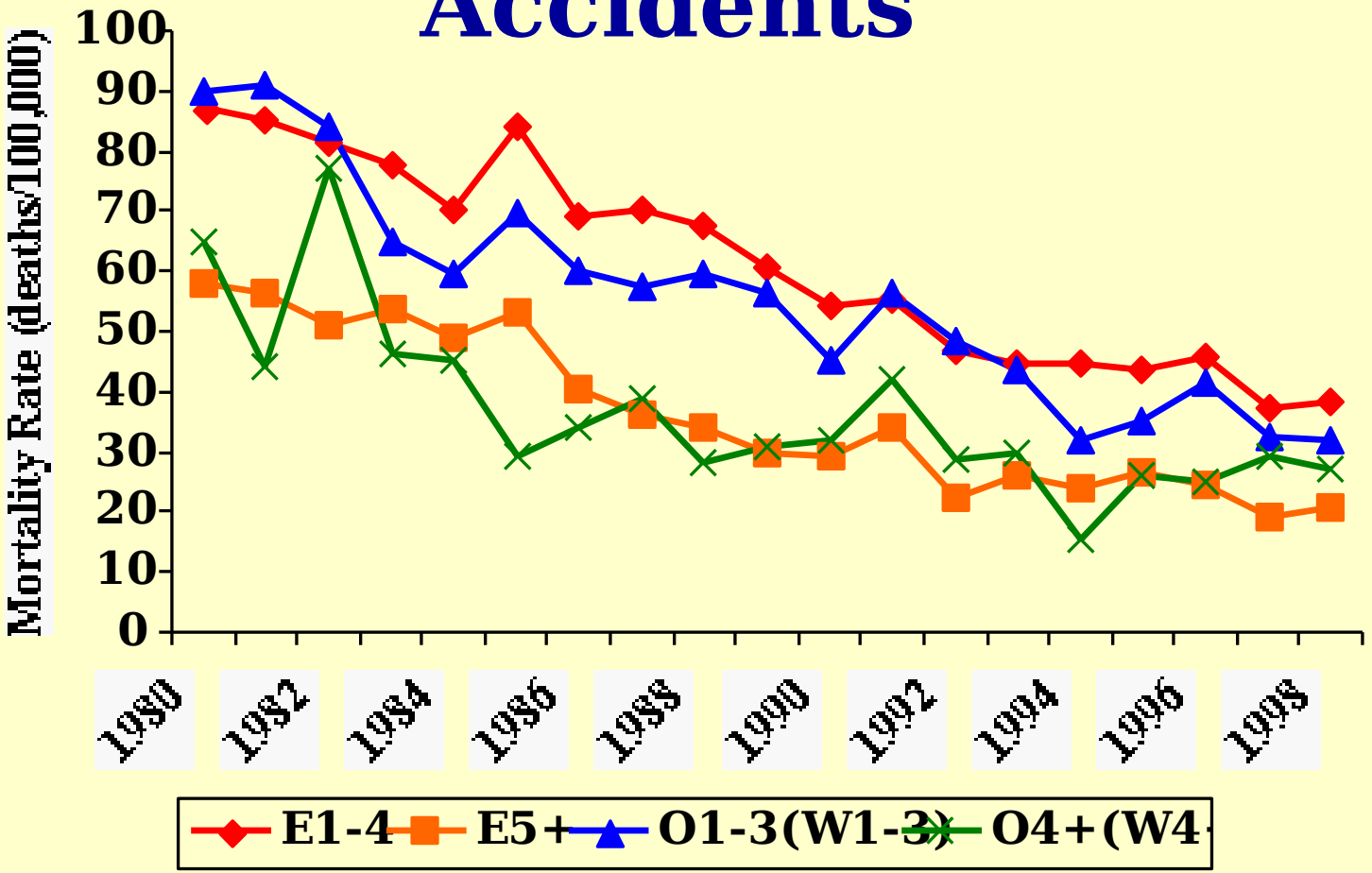
Mortality Rates by Grade, Accidents



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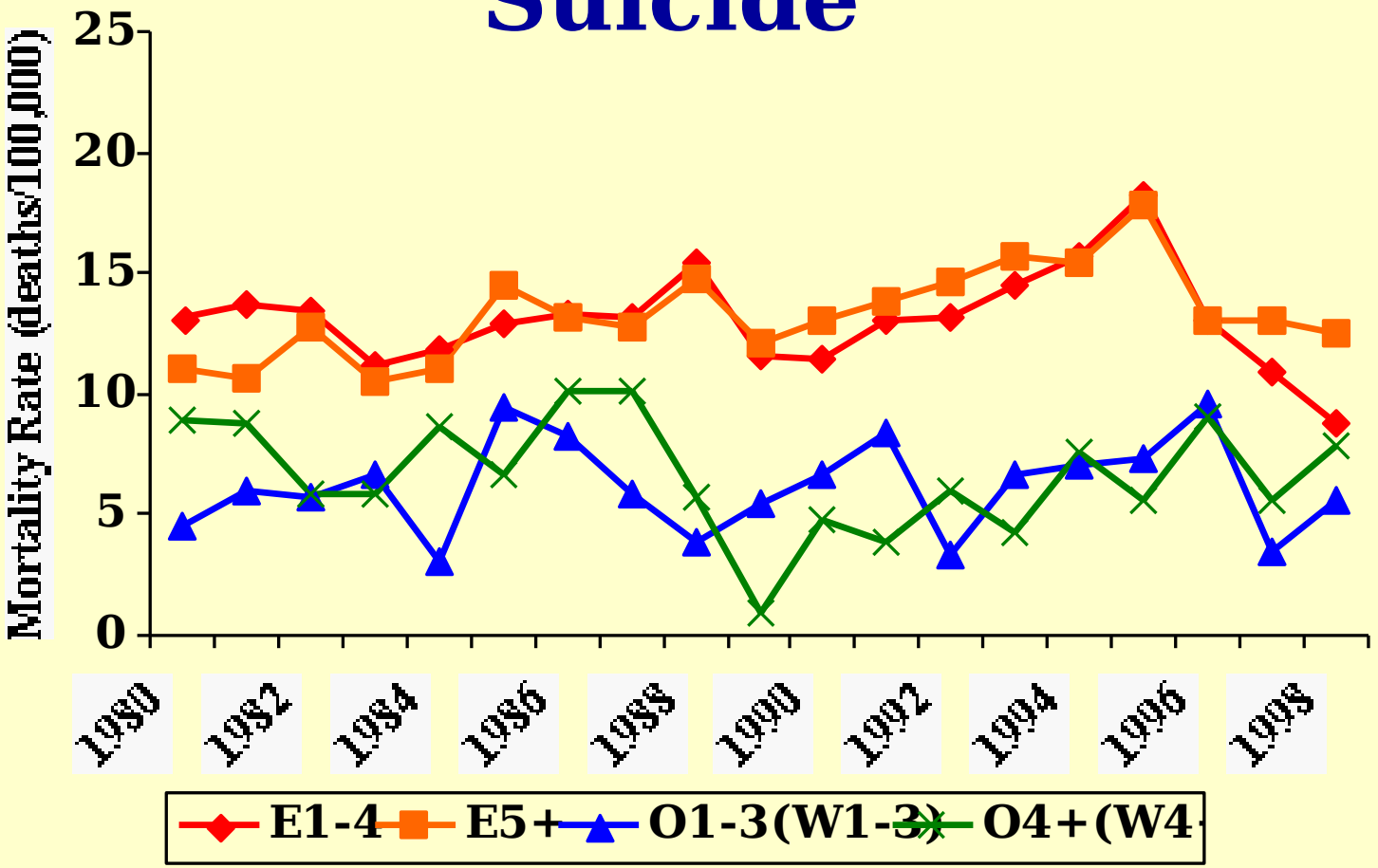
Mortality Rates by Grade, Suicide



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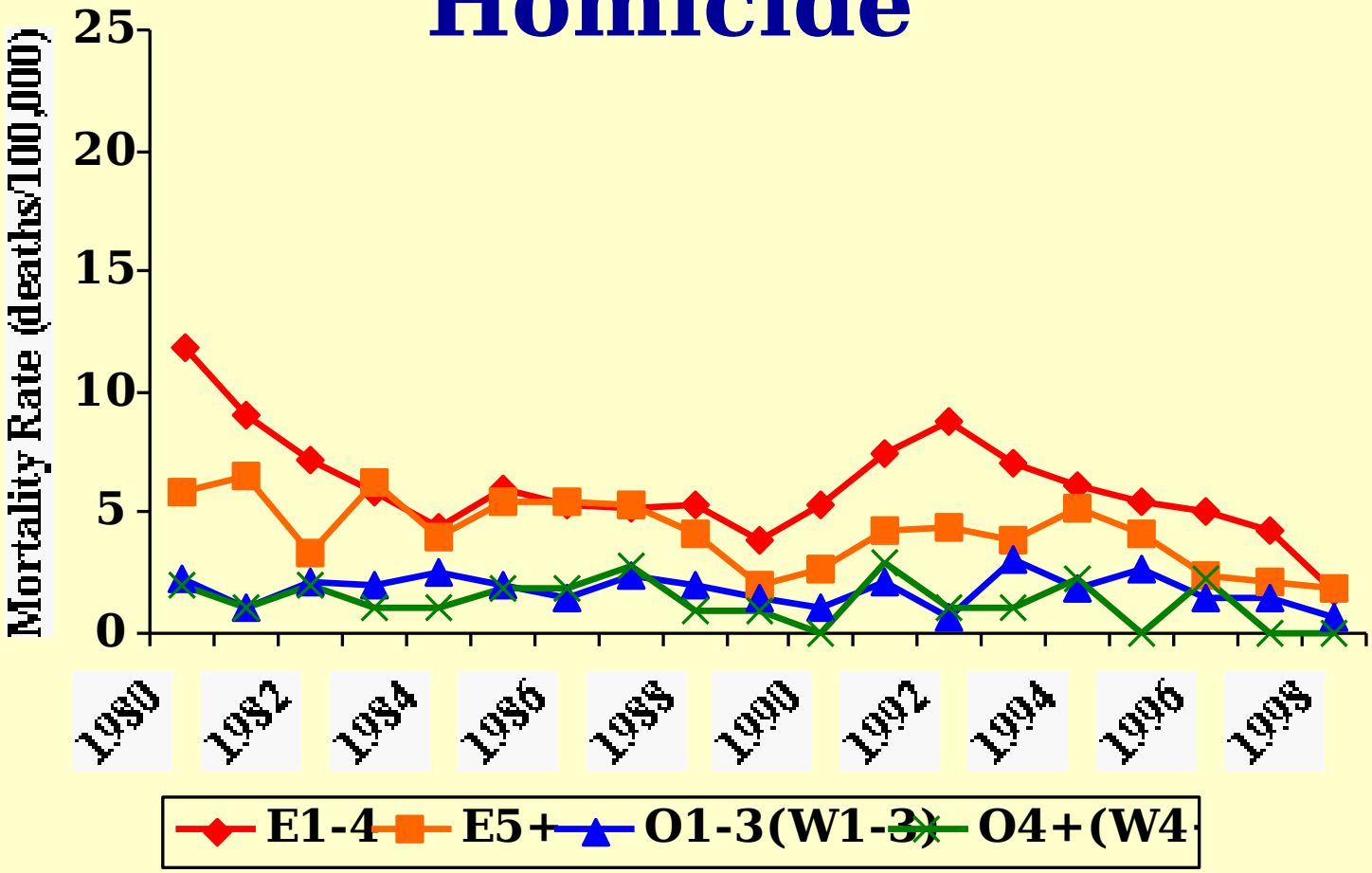

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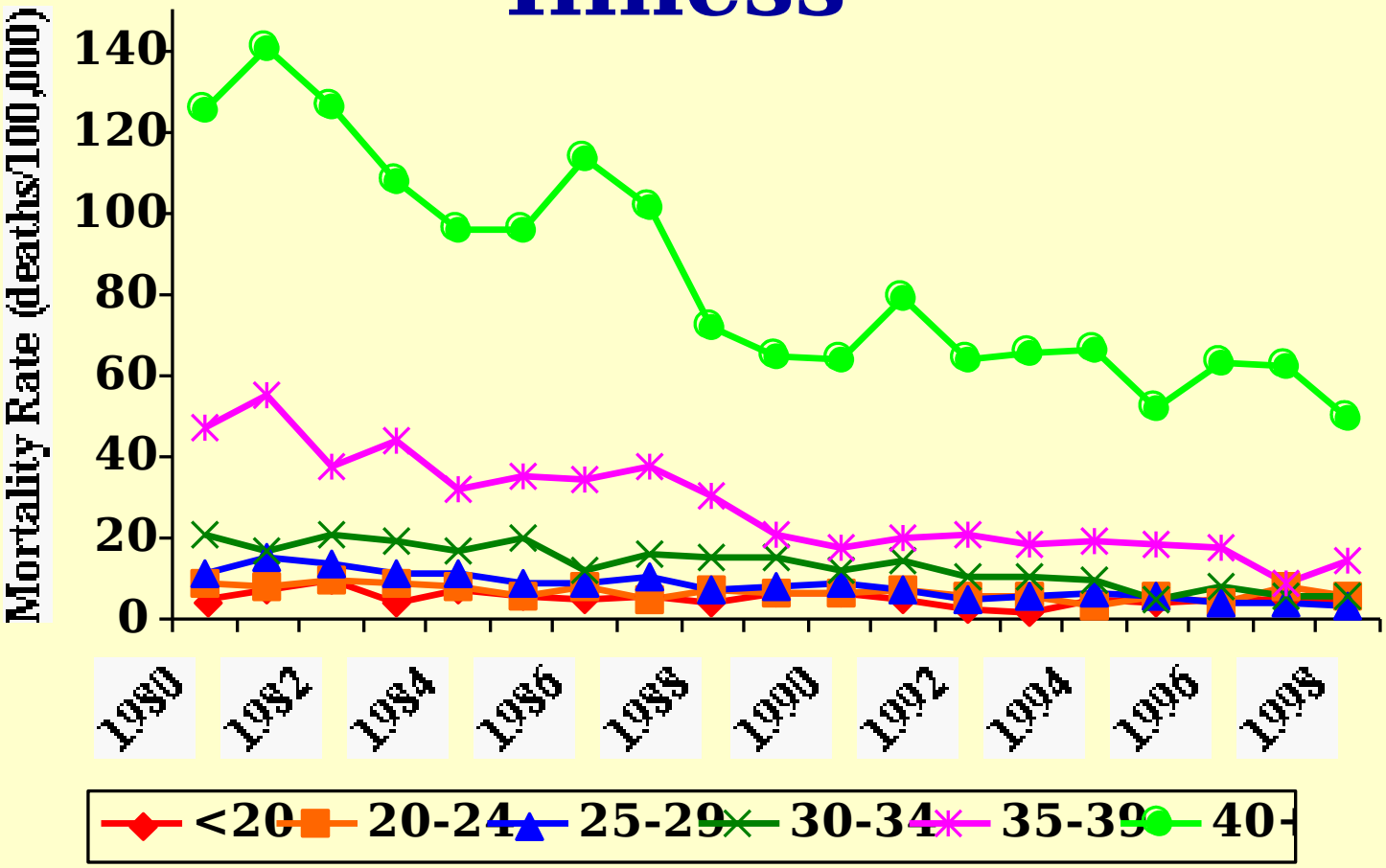
Mortality Rates by Age, Illness



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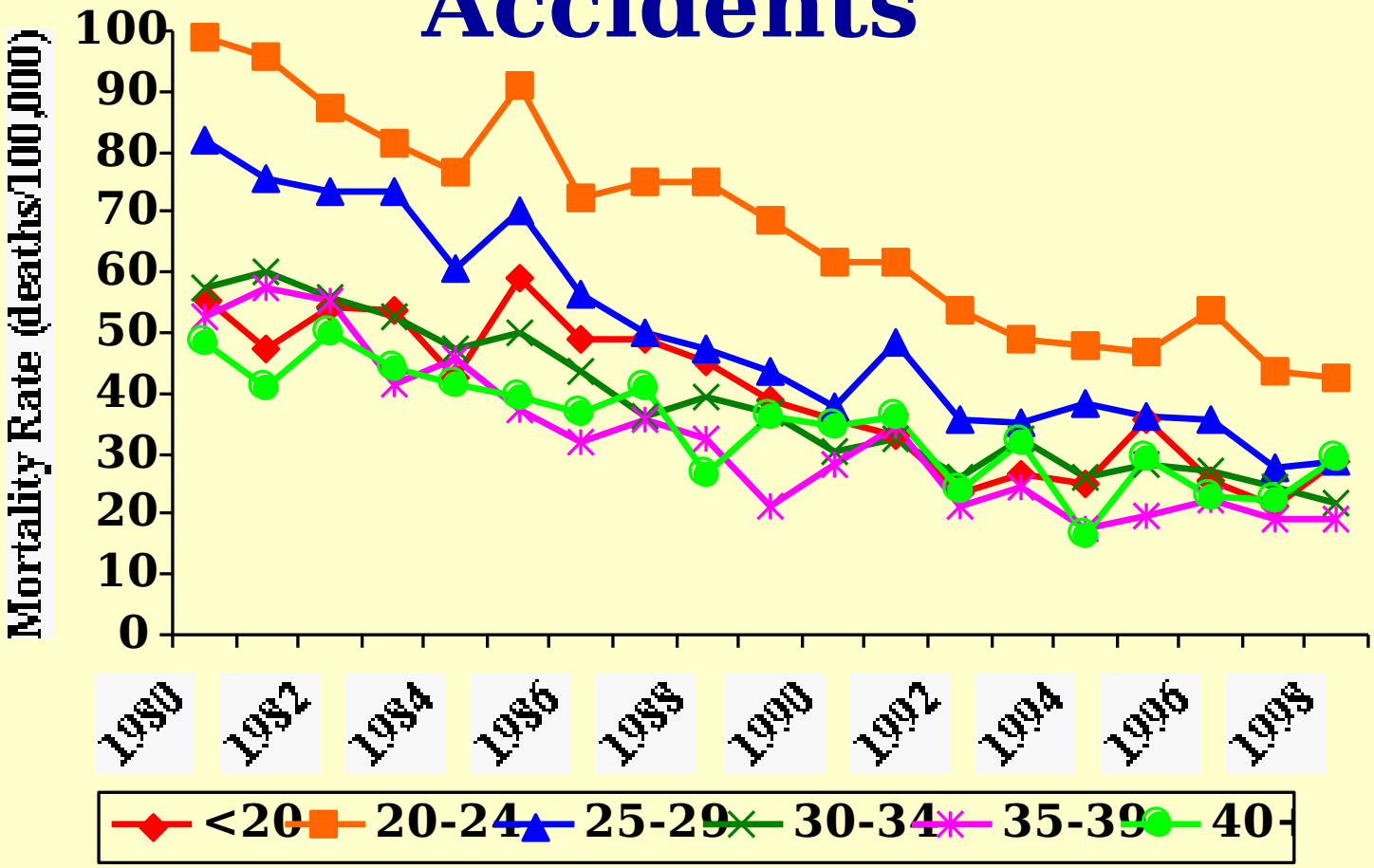

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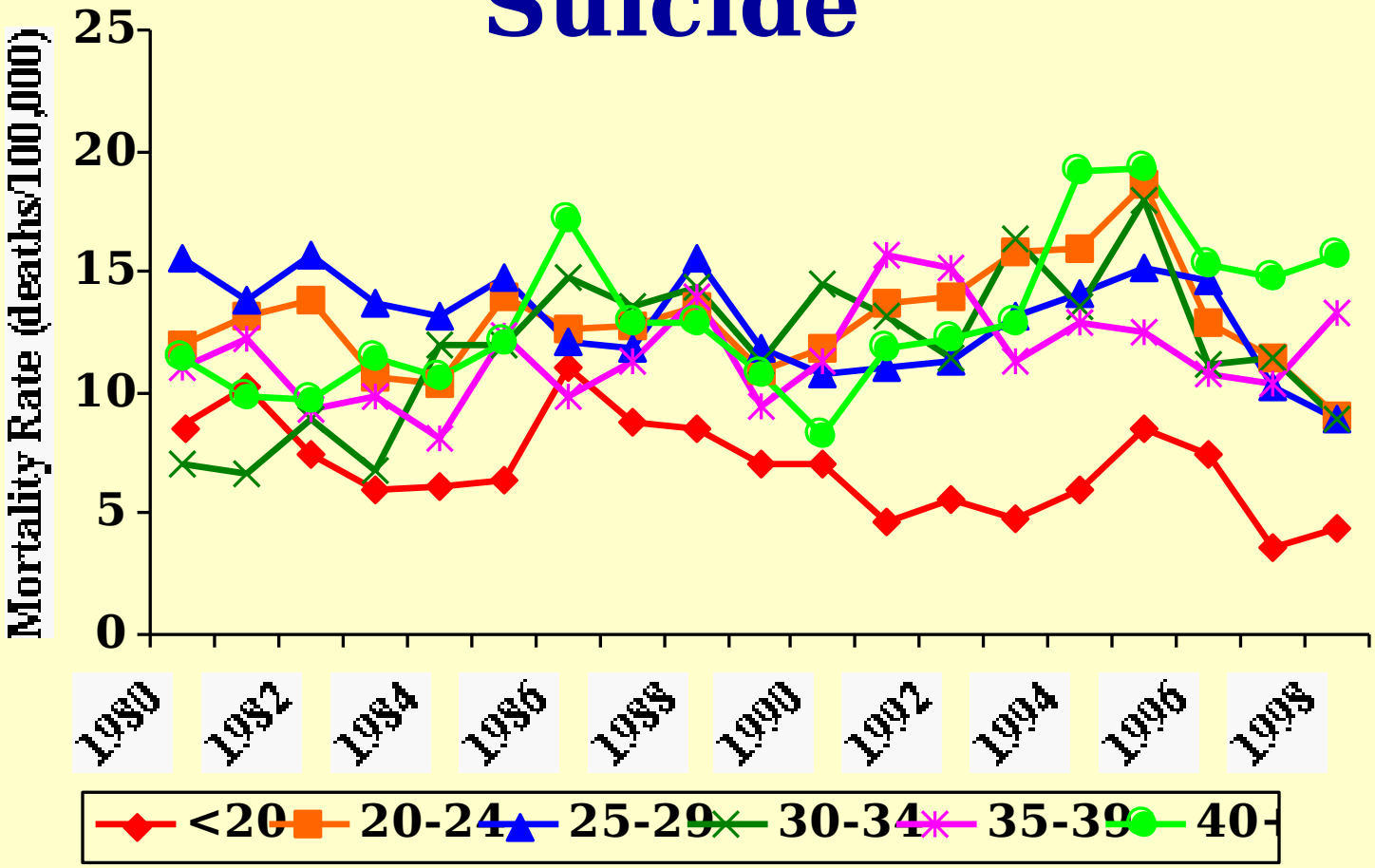

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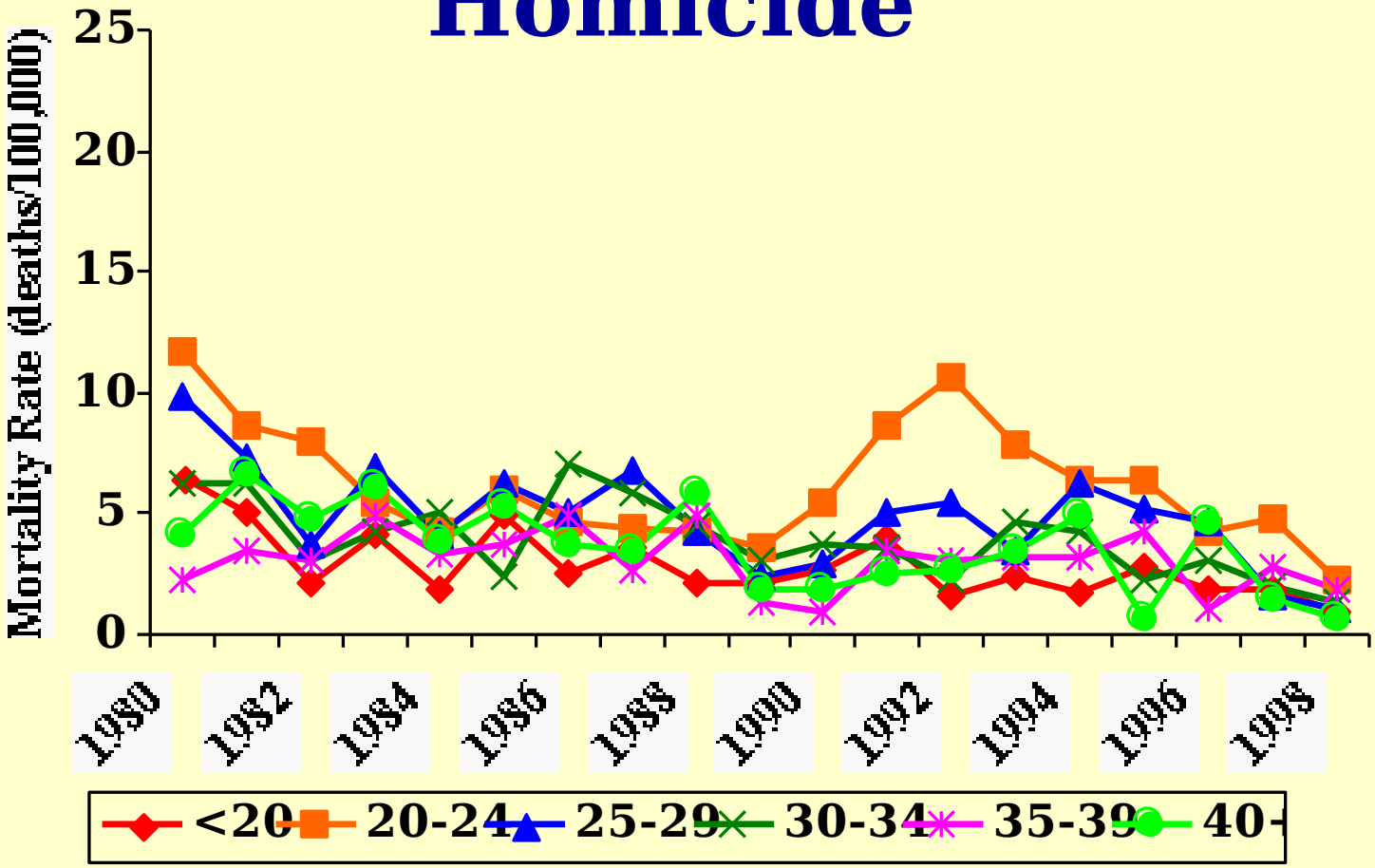

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